

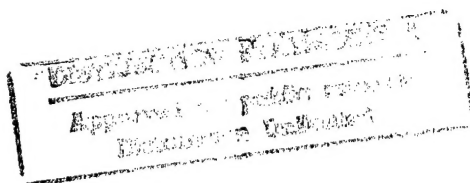
Seminar 1

Joint Military Operations

Application of the Operational Reserve (U)

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Part One: Introduction

Battle of Eylau, February 8, 1807

"Alarums...were sufficient to prove the weakness of the French center and the peril in which it stood, and it behooved Napoleon to resort to an extreme expedient to retrieve the situation...the 10,700 troopers of...the cavalry reserve. These were now ordered to take position in the shattered French center and charge the looming Russian columns.

Nothing could have been more to the taste of the Grand Duke of Berg...80 Squadrons of...horsemen swept forward...it was one of the greatest cavalry charges in history...the troopers swept through the remains of the Russian force retiring from Eylau before dividing into two wings, one plunging into the flank...the other sabering its way through the troops surrounding the square of dead men at the scene of the 14th Regiment's last stand...driving forward, the two cavalry wings crashed through the ...ranks, pierced them, reformed into a single column once more in the Russian rear, and then plunged back the way they had come...to cut down the gunners...."

Chandler, The Campaigns of Napoleon

One of the best known sayings of Napoleon is that "...fire must be concentrated on a single point, and [that] as soon as the breach is made the equilibrium is broken and the rest is nothing. B.H. Liddell-Hart commented that...the key point...[is] that by upsetting the enemy balance, the victory is won; the concentration of fire[s]...are...the means to the true end--which is the...destruction of the enemy's will to resist."¹

These remarks from Chandler's The Campaigns of Napoleon introduce this discussion of the operational reserve. Napoleon exercised his combat power by combining operational maneuver with firepower. He focused on the enemy's critical elements, and he exploited their vulnerabilities with massed firepower and judicious application of force in the campaign's decisive point. As demonstrated at the Battle of Eylau, he was thorough in his endeavors. He stated that "...success can only be achieved through a combination of speed, shock, good order, carefully maintained formations"² and the correct use of the reserves.

¹paraphrased from: Chandler, David G., The Campaigns of Napoleon, The Macmillan Company, New York 1966, Part Three, Napoleon's Art of War, p 135.

²IBID, p 135

Thesis

Warfighters have grasped the operational functions such as fires and logistics, the factors of time, space and forces, and the concepts of critical vulnerability and centers of gravity as base lines in applying the operational art. Warfighting doctrine, however, impresses that the reserve is only a tactical force. This discussion will demonstrate that the reserve is more importantly an operational function-- a function that breaks the equilibrium, upsets the enemy's balance, destroys the enemy's centers of gravity, and achieves strategic effect at the operational level of war. This paper will demonstrate that the operational reserve is not only a key to success, but also that it is a critical function in the commander's estimate and in course of action development.

To effectively apply the operational reserve, the gap between attrition and maneuver-to-fire must be bridged. Hence, this paper will focus on two themes critical to applying the operational reserve. First, the concept that strategic inflection points (a period in time where some fundamental tenants of warfare have changed) surrounding attitude and organization have to be realized by modern military forces, and second, that the role of the operational reserve in a scheme of maneuver is complementary to the tactical reserve. It will demonstrate that the operational reserve is a functional element in a Naval Expeditionary Force's (NEF) prosecution of a military campaign.

Part Two: Operational Art

The American way of war is dependent on a thorough understanding of the operational art. Much has been written and discussed about the 'functions' in the operational art. These

include operational logistics, fires, command and control, communications etc. In reference to these concepts, General C.C. Krulak has said:

“Our ability to influence events in such a fluid and dynamic world rests on the capabilities we accrue in our armed forces. We must examine our organizations...and our institutional attitudes and set a deliberate course to cultivate the capabilities we will need tomorrow. Fundamentally, we must alter the way we view warfare.”³

Warfighter's must grasp General Krulak's intent when he identifies that the US military has reached a strategic inflection point. His point indicates the paradigm shift that transitions forces from attrition warfare to maneuver warfare. It is this point that is most pertinent to the successful appreciation and application of the operational functions, to include the application of the operational reserve.

Krulak's paradigm shift identifies operational maneuver vice tactical firepower as the fundamental method by which enemy weaknesses will be exploited. As such, the aim of maneuver is to afford achievement of a decisive blow. Napoleon alludes to this as the point in time and space where coordinated operational functions combine to destroy the enemy's operational center of gravity. Destruction of this center of gravity will achieve the theater campaign's strategic objective.

In Krulak's paradigm shift, the decisive blow is coordinated and executed at the operational level of war vice the tactical. Firepower dependent, manpower intensive attrition warfare at the tactical level is replaced by maneuver and operational firepower at the operational level of war. Maneuver forces systematically seek gaps, tactically move to positions that compel enemy forces to maneuver away from their own vulnerabilities, and thus expose their center of gravity to attack. Operational maneuver allows the decisive blow to be delivered through a

³Krulak, CC, Operational Maneuver From The Sea, Proceedings, Jan 97, p.26

dedicated force which, by design, is kept out of the maneuver phase. The dedicated forces--the operational reserve--will attack only to exploit the enemy's center of gravity. The combatant commander defines that decisive point, and he commits his operational reserve accordingly.

To grasp the strategic inflection and to understand this application of the operational functions, the concept of attacking with operational firepower at the decisive point must be clear. Napoleon's appreciation of speed (tempo), shock (surprise), formation (operational maneuver), and application of reserves (operational firepower) must be effectively integrated in order to achieve the operationally decisive effect. This is not exploiting success of maneuver units or counterattacking a penetrated force as in tactical engagements. This is a precise, calculated exploitation of enemy vulnerability at the decisive point in a campaign. It is the commander's commitment of his operational reserve to attack the enemy's center of gravity.

The paradigm shift from tactical to operational employment requires adjustment in both institutional attitude and organization. These subject areas define Krulak's strategic inflection points and supplement the paradigm shift from attrition to maneuver.

Attitude

In order to appreciate the application of operational reserves, warfighter's must separate themselves from the traditional tactical employment of combat power. They need to visualize and realize the intent of operational maneuver, and they need to understand what lies beyond the tactical battle. Warfighter's need to separate themselves from the attrition warfare model as defined here:

$$\text{combat power} = \text{firepower} + \text{maneuver}$$

As participants in the maneuver equation, warfighter's must apply the paradigm shift from the firepower base to the maneuver-to-fire base. They must emphasize the orientation on enemy

center(s) of gravity (the operational objective), and must realize that operational maneuver (from the sea in Krulak's case) and the decisive effect they are key ingredients to success on the battlefield. The following model applies:

realization of enemy center(s) of gravity + operational maneuver = focused firepower at the decisive point

This paradigm shift envisions an operational objective (the center(s) of gravity), capitalizes on friendly strength (operational maneuver), exploits enemy weaknesses through maneuver-to-fire tactics (culminating at a decisive point and application of combined arms, synchronized warfare), and realizes an operational commander's end state (destruction of the center of gravity). Firepower equals the operational reserve. Clausewitz amplifies this in On War:

"There are many reasons why the purpose of an engagement may not be the destruction of an enemy's forces, the forces immediately confronting us. Destruction may be merely a means to some other end. In such a case, total destruction has ceased to be the point; the engagement is nothing but a trial of strength. In itself it is of no value; its significance lies in the outcome of the trial."⁴

This passage demonstrates that the attitudinal mind set that locates, closes with, and destroys the enemy by fire and maneuver (the attrition warfare model) has met Krulak's inflection point. Clausewitz further demonstrates that attrition warfare is but one means to an end. He states that the engagement is but a trial of strength, indecisive of its own merit. In applying the functions and principles of operational art, the conclusion is that unless the engagement has operational effect, it has no value; attrition garnishes no true victory. Therefore, the attitudinal inflection point dictates that maneuver at the operational level, followed by destruction of the exposed center of gravity by operational controlled forces, will truly define 'significance in the outcome of the trial.' The warfighter must maneuver-to-fire in order to achieve the decisive effect.

Organization

⁴Von Clausewitz, Carl, On War,

The second inflection point is organizational in nature. Organization within the maneuver-to-fire paradigm relates to organization for combat.

Organization for combat reflects the function of command. It presupposes the ability of a commander's staff to influence action through a planning process. The following expands this thought:

"In the operational art, the task of command grows...more difficult. The commander deals with forces from all services and is frequently involved in combined operations with forces from different countries. Personal tactical experience must be augmented with the study of the theoretical structure of war to include the views of the operational...perspective."⁵

The operational commander must succeed in combining operational functions with diverse forces. He must organize in order to allow operational maneuver within his theater of operations and operational firepower at the decisive point in his campaign. This requires identification of both a theater objective and the organizational structure that capitalizes on operational functions. This implies operational command and control vice the limited, set-piece, attritionist, boundried and phased tactical engagement inherent in the attritionist model.

Organization for combat requires the operational commander to establish a realistic vision of success for his staff. It is the ability of a commander to direct the efforts of a joint or combined staff in the promulgation of an operational scheme that melds the theater objective with the operational art. The commander must guide the organization to effectively relate a series of events (intermediate objectives) to a common objective--preferably exposure of the enemy center of gravity--that will allow for the capitulation of the enemy force. This focus on organization for combat must be enforced by the commander in order to apply maneuver and firepower in his campaign plan, particularly when apportioning assets and assigning units to the roles of maneuver forces and the operational reserve.

⁵Newell, Clayton R., What is Operational Art?, Military Review, Sep 90

The planning staff must also embrace the paradigm shift from firepower to maneuver. They must embrace the concepts in maneuver warfare doctrine, and must apply the factors of time, space and forces to the operational functions. "If there is one single thing that characterizes the conduct of war from the operational perspective, it is ..maneuver.⁶ Hence, staff planning equates to the ability to organize the timely maneuver of forces, to orient firepower and sustainment toward the operational objective, and to synchronize the organization's combat power towards a decisive effect. This is organization for combat at the operational level, and this requires planning for the maneuver-to-fire model.

Part Three: The Operational Reserve

Thus far we have discussed strategic inflection points that dictate the paradigm shift from the firepower base to a maneuver-to-fire base. We will now turn to the decisive point in a campaign and the application of the operational reserve..

What is the reserve?

Tactical vs. operational

"1st Tank Battalion (-)(REIN), 7th Marine Regiment, 1st Marine Division. Occupy Battle Position 21 and prepare counterattack plans in order to destroy enemy forces forward of the forward edge of the battle area or to blunt the penetration of the main battle area."⁷

The reserve is not a new concept. It has been employed through the course of warfare at both the tactical level, as in the mission of the Tank Battalion above, and at the operational level with Napoleon's cavalry at Eylau. The difference between tactical application and operational

⁶Newell, Clayton R, What is Operational Art?, Military Review, Sep 90

⁷Mission of the Reserve Force, Operation Eastern Crescent, AWS, MCCDC, Quantico Va 1993

application lies in the achievement of effect--the destruction of the center of gravity-- vice reinforcing or exploiting actions in tactical actions..

Tactically, reserve forces have both offensive and defensive applications. The reserve task normally remains a tactical asset under control of a commander retaining operational control, as designated in an operations order.

Although founded in a operational concept or scheme of maneuver, field manuals stress the tactical reserve as a tool to complement supporting actions in a battle or engagement in progress, or as a means to affect future operations (as in a pursuit or spoiling action). Here the tactical reserve receives its own mission statement, or task, in an operational scheme of maneuver, as well as means of sustainment. Further, the tactical reserve remains dependent on a higher headquarters for employment, and it focuses on specific and directed tactical scenarios. As such, the reserve may assume the main effort as a 'branch' in a mobile or delaying defensive action, or it may concentrate its power at a directed moment in time and space as a 'sequel' that exploits opportunity or counterattacks as a main tactical effort in the scheme of maneuver.

In offensive scenarios, the tactical reserve operates as a 'trailing force' with branches or sequels to emerging operations or engagements. It also may operate as a planned element in a tactical scheme of maneuver, such as the 4th Marine Expeditionary Brigade did for the reinforced Marine Expeditionary Force ashore during Desert Storm. A 'true reserve,' however, has no planned or subsequent mission, but rather is committed with the flow of battle as a reinforcing element or as an element to maintain tactical momentum in the attack.

Momentum is the key multiplier in these tactical applications, and it is maintained in several ways. Most common are the following applications:

“-exploiting success

- countering enemy counterattack
- sustaining the attack of a committed unit
- employment as a rear-area defensive force”⁸

Command and control of these reserve applications also remains tactical in nature. Operational Control or Attachment to the controlling unit is the usual means, or employment of a tactical passage of lines between separate units (where the reserve assumes a main or supporting effort), or by the reserves assumption of control over a already committed unit. Command and control shifts as dictated by the tactical situation. In all situations described, the reserve force, by default, shifts from a non-committed to a committed unit as it either exploits success or shores-up defenses. This in turn requires another unit to replace it as a higher headquarters' tactical reserve.

Traditional employment of reserve forces also indicates to Corps level commanders that either defensive networks have failed, which has committed a friendly force, or that some friendly unit has reached its culminating point, thus requiring the application of reserve forces to continue to exploit successes on the battlefield or to maintain momentum of the larger unit's attack. This may indicate a friendly vulnerability as orders of battle are exposed and as friendly schemes of maneuver are displayed.

The inflection point: application of the operational reserve

In the operational art, the reserve assumes a broader function. Maneuver warfare places increased importance on Napoleon's model, and today the operational commander must exploit the offensive capability inherent in an established operational reserve.

Operational reserve implies a set-aside force--the exploitation force--allocated, apportioned and committed by the operational commander. As one addresses Krulak's inflection

⁸ See FM series 100, Operations, Corps Operations

points and the maneuver-to-fire baseline, the operational maneuver units depend on a supporting force that will assume the decisive role in a campaign. The operational reserve assumes this functional role at the operational level of war.

The operational reserve projects operational firepower. It is offensive in nature and is focused on exploiting the maneuver unit's success. It focuses exclusively on exploiting the enemy center of gravity. Helmuth Von Moltke, a quintessential operational practitioner, was definitive in examining this concept.

"...in distinguishing between the concept of directing forces from a higher level and in the field, he permitted the higher level[the operational level] to hold forces back while stressing that the operational forces [the maneuver elements] must be committed...once Moltke determined enemy intentions and capabilities and deployed his armies, no forces remained [uncommitted]." ⁹ (emphasis added)

Von Moltke committed his operational reserve at the decisive point. Expanding this function, General Crosby Saint, who applied Von Moltke's theory as Commander-in-Chief, US Army Europe (and concurrently as Commander, Central Army Group and 7th Corps) stated:

"I view the reserve as...an attack force that is saved out of the battle so as to be able to take advantage of a vulnerability of the enemy, to execute the next step of the battle, to complete the scheme of maneuver." ¹⁰

Thus, the reserve force retains the functional capability that decisively engages the enemy's most critical vulnerability or center of gravity following the maneuver-to-fire paradigm.

Napoleon again serves as an example of this paradigm shift. His 'La Maneuver sur les Derrieres' is a tactic used frequently in the early 1800's.

"It's aim was to achieve favorable battle condition on Napoleon's own terms. The Emperor...was always eager to gain total victory for a minimum expenditure of manpower and effort. Consequently, he disliked having to force full-scale, fully arrayed frontal battle--that is to say, marching directly against the enemy to fight him on ground of his (adversary's) choosing, for such battles were inevitably expensive and rarely conclusive...instead, whenever possible, after pinning

⁹ Krause, Michael E., Moltke and the Operational Art, Military Review, Sep 90.

¹⁰ Saint, Crosby E., A CINC's View of Operational Art, Military Review, Sep 90

the foe frontally by a feint attack [the maneuver forces] he marched his main army...occupied a strategic curtain...blocked all crossings...isolated his intended victim...and reduced his chances of reinforcement. Thereafter, Napoleon advanced relentlessly toward the foe's army [the center of gravity] offering him only two alternatives-to fight for survival on ground not of his choosing, or to surrender."¹¹ (emphasis added)

In Napoleon's example, the indirect approach by the maneuver forces executed all tasks except the coup de grace. They either held the enemy forces in place or otherwise diverted them from defending the decisive point. The operational reserve closed with and either destroyed the center of gravity at the decisive point or instilled surrender upon the defending forces.

Application of the operational reserve requires operational initiative. The "reserve force should be identified as a requirement during the commander's estimate and should be briefed as options during course of action development. The commanders intent should specify the use of the reserve for planning purposes...and...apportionment of assets must be identified as they pertain to projected use of the reserve force".¹² As the commander assesses forces and identifies enemy strengths and weaknesses, he must formulate aggregate courses of action that define battlefield success. Following the organizational and attitudinal paradigm shift, the commander must clarify his vision of success, identify the centers of gravity, apportion his forces within a maneuver-to-fire structure, and identify the decisive point to be attacked and exploited by his operational reserve. The reserve is key to this vision of success as it will be the operational asset that attacks and exploits the enemy center of gravity.

The operational reserve must possess balanced combat power. It will likely require a joint venture that synchronizes synergistic effect of combined arms, and it must retain a crisis action

¹¹Chandler, David G., The Campaigns of Napoleon, The Macmillan Company, New York, 1966, p. 162-3

¹²FM 5-00.1 (Draft)

planning capability for flexible, self contained, synchronized air-land-sea-space application of combat power at the decisive point

The operational reserve must be capable of controlling the phased entry of units as the operational situation develops, and it must be prepared to mass its combat power. This implies speed, mobility, firepower, and shock. It must be organized and prepared to accept the command, control, and communications requirements to assume a campaign plan's main effort.

The operational reserve should retain an aiming point that mirrors that of the operational commander's end state in his campaign plan. In his article Campaign Planning, William R. Williamson amplifies the validity of the operational reserve and its relevance to a larger plan in the following quote:

"Major influence on the campaign is attainable through the careful husbanding and employment of reserves. These...may be forces or chemical and nuclear weapons. They may be assets available at the outset of a campaign, or they may arrive during the campaign. The campaign plan must capitalize on every opportunity that can be anticipated or created to withhold important combat resources in anticipation of delivering a decisive blow to the enemy."¹³

Williamson further specifies that "Timely commitment of reserve forces to exploit battlefield success may decide the campaign."¹⁴ It is from this perspective that the reserve becomes a function of the operational art in its own right. Much like logistics, fires, and command, the reserve force should hold its own place in the hierarchy of planning and execution as a function of the operational art.

¹³Williamson, William R., Campaign Planning, Parameters, Journal of the US Army War College, Vol. XIV, No 4.

¹⁴IBID

Part Four: The Reserve as an Operational Function

Application of the Reserve Function

Krulak's organizational and attitudinal inflection points impact on the operational reserve's role as a function. The reserve's end state will aim towards fulfilling theater strategic objectives, and will focus combat power as the operational main effort.

Joint Task Force staffs will have to prepare tables of organization and relative combat power projections that dictate the capabilities and limitations of the reserve force. Mission analysis will drive the ratio of maneuver to firepower assets. It is at the highest operational staff levels (the Combatant Commander's staff) that the organization and structure of the reserve force will be initially laid out, based on the commander's intent and his theater strategic goals. The operational reserve will be a major subordinate action in the execution matrix. It must be considered an operational function in the concept of operations/scheme of maneuver.

As the Operational Reserve will be the force to decisively engage the hub of the enemy's power, then the application of operational reserves should be planned as a function in the same light as operational fires. CINC staffs must synchronize the use of joint and/or combined units, as well as the synchronization of maneuver and firepower at the decisive point. As combat power is apportioned, considerations must be considered regarding the holding back of force multipliers (air power, sea lift) and sustainment capabilities. This includes not only the combat forces, but also the combat support and combat service support required to support the mission. This can only be achieved if the operational reserve is given equal staff cognizance at the operational staff level. As Clausewitz states in Book Eight, "The function of theory is to put all

this in systematic order, clearly and comprehensively, and to trace each action to an adequate, compelling cause.”¹⁵ Hence, the operational reserve must be the function that truly ‘traces action to an adequate, compelling cause.’

The Naval Expeditionary Force

The Naval Expeditionary Force is a formation that transforms the application of the operational art and its functions from theory to reality. The transformation takes place through an expeditionary force applying the concept of operational maneuver from the sea.

“The Naval Expeditionary Force is a cohesive, integrated, task organized, Navy and Marine [and joint-capable] force designated to control and dominate a sea-air-land battlespace. The tools of Naval Expeditionary Force power projection include [surface, air, and subsurface launched] missiles, shells, bombs, bullets and bayonets. Of all the Naval Expeditionary Forces power projection capabilities, the most decisive tool is the amphibious operation.”¹⁶ The amphibious operation is conducted through operational maneuver.

“Like maneuver warfare, operational maneuver from the sea is a fluid and highly dynamic style of naval warfare and amphibious power projection. Designed to allow the NEF to move up and down a littoral with relative impunity, operational maneuver from the sea focuses on breaking the cohesion and integration of an enemy’s defenses while avoiding attrition-style, head-on attack.”¹⁷ As such, the operational commander—the commander that operationally controls the carrier battle group, the amphibious ready group, the embarked expeditionary forces, and the maritime preposition ships, as well as the joint forces that may also be assigned (such as an Army Afloat Brigade)—will seek the enemy critical vulnerabilities, will maneuver his air,

¹⁵Von Clausewitz, Carl, On War, Princeton University Press, Princeton, NJ, 1976, p. 577-8

¹⁶Pierce, Terry C., OMFTS...Making it Work, Marine Corps Gazette, Oct 93, p. 61

¹⁷Pierce, Terry C., Taking Maneuver Warfare to Sea, Proceedings, Apr 95 p. 75

land, sea, special forces and space assets into positions that most threaten an enemy scheme of maneuver or expose enemy vulnerabilities, and will commit his operational reserve at the decisive point by attacking the enemy center of gravity with a centrally commanded combined-arms reserve. His operational reserve will seek Clausewitz's compelling cause.

The battle group commander (the NEF Commander) and his staff (the NEF Command Element) will combine the maneuver of naval forces with the maneuver of Marine forces. They will "plan, develop, and facilitate a continuous, seamless operation from the sea to the distant objective [the decisive point] ashore...the staff [will] allow the NEF Commander to have a centralized vision and decentralized execution"¹⁸ Further, they will plan to maneuver the enemy rather than maneuver to the enemy. As Colonel John Boyd has said, they will have to "generate many non cooperative centers of gravity and magnify an adversary's friction as a basis to shatter cohesion, produce paralysis, and bring about his collapse"¹⁹

The paralysis and shattered cohesion that is exposed is exploited by the NEF Commander as "firepower and movement are used to divert an opponents attention and drain his strength, in order to expose as well a menace and exploit vulnerabilities or weakness. Paralysis, not annihilation, is the goal."²⁰ It is here that the NEF Commander--the operational commander--seeks the decisive action, commits his combined arms operational reserve, and shatters the hub of the enemy power. It is here that the compelling cause--the strategic objective in a military campaign--is met. This is the application of the operational reserve as a function of the operational art.

¹⁸IBID p. 76

¹⁹Kelsey, Robert J., Maneuver Warfare at Sea, Proceedings, Sep 82, p. 32

²⁰IBID

Part Five: Conclusion

“It is the use and withholding of reserves that the great commanders have generally excelled. After all, when once the last reserve has been thrown in, the Commander’s part is played.”²¹ This paper has identified the transition from the attrition model to the maneuver-to-fire model in the operational art. Further, it has confirmed the ultimate aim of the operational reserves and has identified the need for the reserve to be an Operational Function in the planning and execution phases. Marshall Foch summarized this approach in the following statement:

The reserve is a club, prepared, organized, reserved, carefully maintained with a view to carrying out the one act of battle from which a result is expected- the decisive attack.”²²

The operational commander in the 21st century will have to have realized Krulak’s inflection points of organization and attitude, and he will have to accept the maneuver-to-fire paradigm. He will then be able to apply the tenants of maneuver warfare and to apply the decisive effect with his operational reserve. The Operation Reserve is the Sunday Punch that will decide the Campaign.

²¹Schmitt, John F., The Use of the Reserve in Combat, Marine Corps Gazette, Mar 90, p. 63

²²IBID, p. 63

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